OB3.3 WARNGEN WFO IMPLEMENTATION INSTRUCTIONS 8/30/04

1. INTRODUCTION

OB3.3 WarnGen contains several important changes. The most notable are segmented followup products, optional stationary storms in flash flood products and a 10 minute window for issuing product expirations and cancellations.

The segmented followup products are currently scheduled to be implemented nationwide on November 3, 2004 at 12 UTC. VTEC is currently scheduled to be implemented nationwide during early February, 2005. Detailed implementation instructions will be provided as the segmentation and VTEC dates approach.

The AWIPS Site Support Team (SST) has prepared the following summary. We hope this answers your questions. If you have problems, open a Trouble Ticket with the NCF. If the NCF can't help, they will contact the SST.

If you have not yet installed OB3.3, the most important items to read below are Part 4 and Appendix One. Items below that give important background information on the OB3.3 pre-install are Parts 2 and 5. VTEC background is provided in Part 3.

If you're customizing OB3.3 templates, the most important items below are Parts 7 and 8. Items that give important background information on OB3.3 templates are Parts 6, 10, 11 and Appendix Two.

If you're testing and training with OB3.3 templates, the most important items below are Part 9 and Appendix Three.

2. BACKGROUND ON NEW WARNGEN FEATURES

OB3.1 introduced the following new WarnGen features:

1. New VTEC format (VTEC product type added - operational, test, experimental)
2. Ability to use different CCC and XXX values
3. New QC checker turned on for SVR, TOR, FFW, SMW products
4. Initial storm motion changed to be the same as used for the 8 bit SRM product

The following FSL document describes OB3.1 WarnGen:

http://www-sdd.fsl.noaa.gov/~ramer/noaa/ob3.1-wgn/ob3.1-wgn.html

OB3.3 introduces the following new WarnGen features:

1. Segmented followup products
2. Optional stationary storm motion for flash flood products
3. A 10 minute window for issuing product expirations and cancellations

The following FSL document describes OB3.3 WarnGen:

http://www-sdd.fsl.noaa.gov/~ramer/noaa/ob3.3-wgn/ob3.3-wgn.html

3. BACKGROUND ON VTEC TESTING AND IMPLEMENTATION

The VTEC Operational Test and Evaluation (OT&E) is scheduled during approximately August 31 through October 8, 2004. The sites involved in the OT&E will need to implement OB3.1 or later WarnGen templates (these contain the correct VTEC format). During the VTEC OT&E, non-segmented WarnGen followup products will be used (because the required 120 day notice to outside users was not given).

If a WFO is in severe weather during one of the VTEC transition periods, special care is needed. For each warning and associated followup, the same VTEC convention must be used. That is, on the VTEC implementation day, assume that a TOR is issued without VTEC at 1150Z (expiring at 1220Z). VTEC implementation occurs 10 minutes later at 12Z. Then an SVS is issued at 1210Z (to followup the 1150Z TOR) must not include VTEC. If a new TOR is issued at 1205Z, it (and associated followup SVSs) must all contain VTEC.

The VTEC OT&E sites will experience three VTEC transition periods. These are:

1. turning on VTEC at the start of the VTEC OT&E (about August 31, 2004)
2. turning off VTEC at the end of the VTEC OT&E (about October 8, 2004)
3. turning on VTEC permanently (early February, 2005)

Most sites will only experience the last VTEC transition period.

4. BACKGROUND ON THE OB3.3 WARNGEN INSTALLATION

The OB3.3 installation will preserve your pre-OB3.3 WarnGen template configuration. The OB3.3 templates will not be needed until the WarnGen segmented followup products are implemented (currently scheduled for November 3, 2004 at 12 UTC). For most sites, the transition to using OB3.3 templates should be completed after severe weather season and well before segmentation implementation.

On the segmentation implementation day (11/3/04), some sites will be running AWIPS release OB3.3 and some will be running OB4. This should not make a difference as we expect that both

releases will contain the same WarnGen templates (that is, the OB3.3 templates).

All WarnGen sites will run the script ob33warngenprep.csh as part of the OB3.3 pre-install process. This script will save a full set of "legacy" WarnGen templates in /data/fxa/customFiles, remove the obsolete <SEGMENTED> flag from all legacy templates and install the new OB3.3 templates in /data/fxa/nationalData. "Legacy" templates are whatever templates (OB1, OB2, or OB3.1) you are currently using. Details on obtaining and running the OB3.3 pre-install script are in Appendix One below.

In OB3.3, 11 new WarnGen templates will be delivered. The biggest changes are that the followup templates (SVS, FFS, MWS) become segmented. Due to the training and customization issues that result from new template implementation, OB3.3 was designed to preserve, as much as possible, the templates that were active just prior to the install.

Legacy templates (OB1, OB2, or OB3.1) can still be used after the OB3.3 install. Testing and training for the new segmented followup templates must be completed well before the nationwide implementation time, currently scheduled for November 3, 2004 at 12 UTC. Therefore, sites will need to migrate any customized legacy templates to the OB3.3 templates as soon as possible after the install of OB3.3. It is highly recommended that sites examine the default OB3.3 templates before performing any customizations.

5. BACKGROUND ON THE OB3.3 WARNGEN PRE-INSTALL SCRIPT

The following describes in further detail what the ob33warngenprep.csh script does during the pre-installation of OB3.3.

1. The script copies any non-customized baseline OB3.1 WarnGen templates from /data/fxa/nationalData/ into /data/fxa/customFiles. The baseline OB3.1 templates will not replace any existing customized templates in customFiles. After running this script, /data/fxa/customFiles will contain the sites' customized templates and the non-customized baseline OB3.1 WarnGen templates. The obsolete <SEGMENTED> tags are removed from the legacy templates.

2. The script will also back up the legacy WarnGen templates found in /data/fxa/customFiles and some WarnGen configuration files into the following three directories on DS1. Any <SEGMENTED> tags in the legacy template will first be removed before the copy is made into the following directories:

> /data/fxa/prev-wgn33/localization/LLL - Will contain files *wwaConfig.template and *wwa*preWWA from directory /awips/fxa/data/localization/LLL on DS1, where the script is run.
>
> /data/fxa/prev-wgn33/customFiles - Will contain file makeWWAtables.patch from

/data/fxa/customFiles, and have all *wwa*preWWA files from /data/fxa/customFiles.

/data/fxa/prev-wgn33/localization/nationalData - Will contain files *wwaConfig.template and *wwa*preWWA from ds1:/data/fxa/nationalData.

Sites will be able to use the back-up files for reference. However, remember that immediately after OB3.3 install, all legacy templates will be in /data/fxa/customFiles and all new delivered OB3.3 templates will be in /data/fxa/nationalData. After the OB3.3 install, nationalData will have all the old unchanged OB3.1 templates plus the eleven new OB3.3 templates.

More information, if necessary, will be added to the lessons learned document for OB3.3 at http://www.ops1.nws.noaa.gov/awips_softwre.htm

6. BACKGROUND ON RECENT WARNGEN TEMPLATE CHANGES

OB2 provided an entirely new set of WarnGen templates to accommodate the automated VTEC followup procedure. OB2 templates are considerably different from OB1 templates.

OB3.1 WarnGen provided an entirely new set of WarnGen templates to accommodate a VTEC format change. OB3.1 templates have only minor changes (but important changes) compared to OB2 templates.

OB3.3 WarnGen provides 11 new templates to accommodate segmented followup products, storm motion for flash flood products and changes in city lists. Some OB3.3 templates have major changes (compared to OB3.1 templates) and some have only minor changes. Here is a summary of the new WarnGen template changes in OB3.3 (compared to OB3.1):

SVR	wwa_svr.preWWA	minor cities list change
TOR	wwa_tor.preWWA	minor cities list change
SMW	wwa_specmarine.preWWA	minor cities list change
FFW	wwa_ffw.preWWA	many storm motion changes, cities list change
FFW (dam break)	wwa_dam_break.preWWA	changes at top of template
FFW (combined FFW/SVR)	wwa_ffw_svr.preWWA	minor cities list change
SVS	wwa_svrwx_sta_county.preWWA	many segmentation changes, cities list change, CAN/EXP call to action
MWS	wwa_mar_wx_sta.preWWA	many segmentation changes, cities list change, CAN/ EXP call to action

MWS (no SMW)	
wwa_mws_nosmw.preWWA	many segmentation changes, cities list change
FFS (zone)	
wwa_flflood_sta.preWWA	many segmentation changes
FFS (county)	
wwa_flflood_sta_county.preWWA	major changes throughout template (segmentation, storm motion, cities list, CAN/EXP call to action)

In summary, the warning templates have only minor changes (except the FFW and FFW - dam break have many changes). All the followup templates have many changes.

7. WHICH OB3.3 IMPLEMENTATION PLAN SHOULD I USE?

A suggested simplified implementation plan for OB3.3 WarnGen templates follows in this document. A more comprehensive and complex implementation plan (oriented toward sites currently using OB1 templates - that is, sites needing extensive template changes) is available at the following FSL web page:

http://www-sdd.fsl.noaa.gov/~ramer/noaa/ob3.3-wgn/ob3.3-setup.html

The first step in the FSL document mentions actions to take before the installation. The script listed (ob33warngenprep.csh) is available from the NOAA1 server. Instructions for downloading and running this script are included below in Appendix One. This is the same script that is used in the normal OB3.3 pre-install instructions. If all customized templates (including those from service backup sites) were placed in /data/fxa/customFiles prior to the installation, then this script will strip off all obsolete <SEGMENTED> references and preserve the templates in a backup directory (ds1:/data/fxa/prev-wgn33). Any templates on the workstation (/awips/fxa/data/localization/LLL) will not be processed by the ob33warngenprep.csh script.

In steps 2 through 8 of the FSL document, the basic migration plan is to set up one of the workstations so it can quickly be converted from using the legacy templates to using the OB3.3 templates and vice-versa. That machine will be used to complete the OB3.3 customization process and to do user training. Once the training and customization are finished, the OB3.3 customized items from that host will be transferred to the rest of the workstations on site. Step 9 describes what needs to be done to turn on segmented templates operationally. Beware that the scripts in the FSL document parts 2 through 9 have not been tested in an operational WFO environment. It is extremely important that all training and customization, including testing the QC with segmentation activated for all customized templates, be completed well in advance of the national segmentation turn on date. This is currently planned for November 3, 2004, at 12 UTC.

8. IMPLEMENTATION FOR SITES CURRENTLY USING OB3.1 TEMPLATES

After OB3.3 is installed, a full set of legacy templates will be in customFiles. This will consist of the default OB3.1 templates that previously were in nationalData plus your customized OB3.1 templates. The obsolete <SEGMENTED> tag will be automatically removed from all these templates.

It is not necessary to use the procedures in the FSL document "Migration, testing and training issues for OB3.3 WarnGen." This document is mainly for sites that are using OB1 templates (that is, major template changes are needed). Beware that the FSL scripts have not yet been field tested (the long script in FSL's step number one has been tested - this is script ob33warngenprep.csh). The FSL document is available at:

http://www-sdd.fsl.noaa.gov/~ramer/noaa/ob3.3-wgn/ob3.3-wgn.html

The transition from OB3.1 to OB3.3 templates is somewhat complex. Here is a suggested simplified migration plan.

1. Examine the changes in the eleven new OB3.3 templates (summary provided above in Part 6). One way to do this is with the Unix "diff" command. For example, to compare the OB3.3 baseline tornado template with your custom OB3.1 tornado template, do the following in a scratch area on the workstation:

cp /data/fxa/nationalData/wwa_tor.preWWA wwa_tor.OB33
cp /data/fxa/customFiles/LLL-wwa_tor.preWWA wwa_tor.OB31
diff wwa_tor.OB31 wwa_tor.OB33

2. Choose one seldom used WarnGen workstation (the "migration" workstation) for OB3.3 template testing and training.

3. Work with the warning templates (SVR, TOR, SMW, FFW (dam break), FFW (combined FFW/SVR). For these templates, it's easiest to edit your custom versions of these templates to add the new OB3.3 items. These OB3.3 template have few changes with respect to the OB3.1 templates. As a quick test, the editing can first be done on the files /awips/fxa/data/localizationDataSets/LLL/wwa*Prod. Then you can see the effects of the changes without running a workstation localization. When you're satisfied with these templates and want to implement the new templates on all workstations, the templates in /data/fxa/customFiles/*wwa*preWWA can be edited. Then workstation localization is run using "./mainScript.csh -wwa" to create the localization output files used by WarnGen (localizationDataSets/LLL/wwa*Prod).

4. Work with the followup templates and FFW templates (SVS, MWS, FFS, FFW). These templates have many changes in OB3.3 and it may be easier to start with the default OB3.3

templates and add your customizations. As in step 3 above, editing/testing can first be done in localizationDataSets/LLL. Then the changes can be made in customFiles and the workstations localized.

It is recommended that extensive testing and training be completed for the followup and FFW products since these contain the major OB3.3 changes. Again the testing should be competed well in advance of the followup segmentation implementation (currently scheduled for November 3, 2004). More detailed instructions on how to effect the segmentation switch on November 3 will be provided.

If a more comprehensive scheme is desired to set up the migration workstation, see the FSL document, steps 2 and 3. This involves setting up a special customFiles directory on the workstation and running special workstation localizations.

If needed, consider template changes for your service backup sites.

At the end of this document, Appendix Two describes how to identify OB1, OB2, OB3.1 and OB3.3 templates.

9. SWITCHING BETWEEN SEGMENTED AND NON-SEGMENTED TEMPLATES

The OB3.3 templates can (and should) be used before followup segmentation is implemented. OB3.3 provides a software switch that can be used to turn segmentation on and off. For testing purposes on one workstation, segmentation can be turned on by doing the following as user fxa:

cd /awips/fxa/data/localizationDataSets/LLL (where LLL is your site ID)
cp /data/fxa/nationalData/seg_svs_control.inc.SEGSVS seg_svs_control.inc
(turn on segmentation)
cp /data/fxa/nationalData/textQC.config.SEGSVS textQC.config
(install the segmented QC configuration file)

If VTEC is also desired, issue the following commands (on the workstation as user fxa):

cd /awips/fxa/data/localizationDataSets/LLL (where LLL is your site ID)
echo ON > warnGenVTEC.mode

The next time WarnGen is launched (D2D does not need to be restarted), the changes will take effect.

Testing of the segmented followup is complicated, since a warning needs to be issued before the followup segmentation can be tested. If appropriate, a test warning can be created and saved/sent. Beware that if a warning is saved (not sent) in the AWIPS text database, triggers likely will disseminate the warning to NOAA Weather Radio and NOAA Weather Wire. Then a

segmented followup can be created, but not stored/sent.

Under no conditions should any segmented WarnGen followup products be stored or transmitted before the segmentation implementation date. The segmentation is an important format change and any segmented products will confuse automated systems that process NWS products.

If not possible to save/send test warnings, the flat text technique should be used to save the warning in a Unix flat file instead of saving/sending. After the test warning is saved in a Unix file, the followup products can be tested. Instructions for using the flat text technique are included in Appendix Three below.

After segmentation testing is done, the workstation is returned to normal operational mode by doing the following as user fxa:

cd /awips/fxa/data/localizationDataSets/LLL (where LLL is your site ID)
rm seg_svs_control.inc
rm textQC.config

If VTEC was turned on, issue the following commands to turn off VTEC (on the workstation as user fxa):

cd /awips/fxa/data/localizationDataSets/LLL (where LLL is your site ID)
rm warnGenVTEC.mode

The next time WarnGen is launched (D2D does not need to be restarted), the changes will take effect.

10. IMPLEMENTATION FOR SITES CURRENTLY USING OB2 TEMPLATES

It may be easiest to transition from OB2 to OB3.3 templates in two phases. First convert from OB2 to OB3.1 templates. Then use the instructions above (Part 8) to convert from OB3.1 to OB3.3 templates.

The transition from OB2 to OB3.1 templates is fairly simple. There are only a couple changes (though important changes) in OB3.1 templates compared to OB2 templates. The easiest way to implement OB3.1 templates is to manually add the OB3.1 changes to your current OB2 templates. Make sure the OB3.1 QC checker doesn't complain about your custom OB3.1 templates.

Beware that OB2 templates have the incorrect VTEC format, so all VTEC lines must be fixed. If the OB3.1 pre-install script was run, the VTEC should be OK. See Appendix Two below on distinguishing between OB2 and OB3.1 templates.

It is not necessary to use the procedures in the FSL document "Migration, testing and training issues for OB3.1 WarnGen." Beware that the FSL scripts have not yet been field tested (the scripts in FSL's step number one have been tested). The FSL document is available at:

http://www-sdd.fsl.noaa.gov/~ramer/noaa/ob3.1-wgn/ob3.1-wgn.html

11. IMPLEMENTATION FOR SITES CURRENTLY USING OB1 TEMPLATES

Transitioning from OB1 to OB3.3 templates will be difficult. There are numerous important differences in the the OB1 and OB3.3 templates.

OB1 templates may work under OB3.3, but this is not recommended. The WarnGen QC checker may complain about some OB1 template items. The QC checker will not prevent products from being transmitted, but will give warning messages that must be acknowledged in order to send products.

FSL has provided OB3.3 WarnGen transition information in the document "Migration, testing and training issues for OB3.3 WarnGen." The FSL document is available at:

http://www-sdd.fsl.noaa.gov/~ramer/noaa/ob3.3-wgn/ob3.3-setup.html

Beware that the FSL scripts have not been field tested (the scripts in FSL's step number one have been tested). If needed, the SST can provide help with completing the transition from OB1 to OB3.3 WarnGen templates. Open a Trouble Ticket with the NCF and make your request.

APPENDIX ONE: DOWNLOADING AND RUNNING OB3.3 PRE-INSTALL SCRIPT

The following is in the OB3.3 install instructions (AWIPS Software Installation Instructions).

(1) From a Linux workstation, log in as root, open a telnet window, and logon to DS1 as root:

rlogin ds1

(2) Go to the "/data/local/ROB3.3" directory:

su – fxa
cd /data/local/ROB3.3

(3) Connect to the NOAA1 ftp server by entering the command:

ftp 165.92.25.15

Once connected to the NOAA1 ftp server, login as user ftp, with your email address as the password.

(4) Obtain two files from the NOAA1 ftp server. One file will used during the upgrade for WarnGen (ob33warngenprep.csh) the other by WWA (ob33_WWA_hydro_marine). Type the following:

binary
hash
prompt (use this only to prevent prompts for each file)
cd /pub/BuildOB3.3
mget * (two files will be received)
bye (log off the NOAA1 server and return to your local ds1)
chown fxa:fxalpha ob33warngenprep.csh
chmod 775 ob33warngenprep.csh
chown fxa:fxalpha ob33_WWA_hydro_marine.csh
chmod 775 ob33_WWA_hydro_marine.csh

(5) Be sure that all custom templates (including those needed for service backup sites) are in /data/fxa/customFiles.

(6) Switch to user fxa and cd to the ROB3.3 directory:

su - fxa
cd /data/local/ROB3.3

(7) Run the following script to preserve current WarnGen template setup.

ob33warngenprep.csh

APPENDIX TWO: DISTINGUISHING BETWEEN OB1, OB2, OB3.1 AND OB3.3 WARNGEN TEMPLATES

The following is a simple method for quickly distinguishing between OB1, OB2, OB3.1 and OB3.3 WarnGen templates. This section does not include all differences among the four versions of templates - that is, this section should not be used for editing or customizing your WarnGen templates.

The warning templates (TOR, SVR, FFW, SMW) have easily recognized differences among OB1, OB2 and OB3.1. There is only a minor difference between OB3.1 and OB3.3 warning templates.

Below are the top sections of SVR default templates in OB1, OB2, OB3.1 and OB3.3. OB1 templates do not have the <REISSUE> tag while OB2, OB3.1 and OB3.3 templates do have this tag. OB1 templates have only two variables in the AUX_INFO section ("wx_hazard" and "issue_prod"). OB2, OB3.1 and OB3.3 templates have the above two variables plus the "init_with" variable in the AUX_INFO section. In the ZCZC line, OB3.1 and OB3.3 templates use the "SVRid" variable in place of the "cccValue" and "xxxValue" variables, plus the literal "SVR" used in the OB1 and OB2 templates. OB3.1 and OB3.3 templates have the new "O" field at the start of the VTEC line. Only OB3.3 templates have added "interval" and "delta" fields in the "other cities" section. These items are highlighted below.

The followup templates have small differences among OB1, OB2 and OB3.1. There are major differences between OB3.1 and OB3.3 templates due to the change from non-segmented to segmented products. OB3.3 templates "#include" the seg_svs_control.inc segmentation configuration file and make use of variables from this file through the template. At the end of Appendix Two are the top sections of OB3.1 and OB3.3 default SVS templates with the changes highlighted.

OB1 SVR DEFAULT TEMPLATE:

//"SEVERE THUNDERSTORM"

<DURATIONS | 10 | 15 | 20 | 25 | 30=default | 40 | 45 | 50 | 1:00
| 1:15 | 1:30>
<DEPICT_KEYS|1083>

#include "${CURRENT_CWA}-offtIncl.txt"
<AUX_INFO |wx_hazard=Severe Thunderstorm
|issue_prod=$$cccValue!SVR$$xxxValue! >

ZCZC **$$cccValue!SVR$$xxxValue!** DEF&
TTAA00 KDEN <NOW | ddhhmm | gmt>&&
#include "wwa_county_ugc.template"
&/NEW.$$wmoValue!.SV.W.ETN#.<START|ymdthmz|gmt>-<EXPIRE|ymdthmz|gmt>/

BULLETIN - EAS ACTIVATION REQUESTED&
SEVERE THUNDERSTORM WARNING&
#include "${CURRENT_CWA}-headerIncl.txt"
<NOW | header | local >

OB2 SVR DEFAULT TEMPLATE:

//"SEVERE THUNDERSTORM"

<DURATIONS | 10 | 15 | 20 | 25 | 30=default | 40 | 45 | 50 | 1:00
| 1:15 | 1:30>
<DEPICT_KEYS|1083><REISSUE>

#include "${CURRENT_CWA}-offtIncl.txt"
<AUX_INFO |wx_hazard=Severe Thunderstorm
|issue_prod=$$cccValue!SVR$$xxxValue!
|init_with=$$cccValue!SVR$$xxxValue! >

ZCZC **$$cccValue!SVR$$xxxValue!** DEF&
TTAA00 $$wmoValue! <NOW | ddhhmm | gmt>&&
#include "wwa_county_ugc.template"
&/NEW.$$wmoValue!.SV.W.$$ETN_VAL!.<START|ymdthmz|gmt>-<EXPIRE|ymdthmz|gmt>/

BULLETIN - EAS ACTIVATION REQUESTED&
SEVERE THUNDERSTORM WARNING&
#include "${CURRENT_CWA}-headerIncl.txt"
<NOW | header | local >

OB3.1 SVR DEFAULT TEMPLATE:

```
//"SEVERE THUNDERSTORM"

<DURATIONS | 10 | 15 | 20 | 25 | 30=default | 40 | 45 | 50 | 1:00
        | 1:15 | 1:30>
<DEPICT_KEYS|1083><REISSUE>

#include "${CURRENT_CWA}-offtIncl.txt"
<AUX_INFO |wx_hazard=Severe Thunderstorm
        |issue_prod=$$SVRid!
        |init_with=$$SVRid! >

ZCZC $$SVRid! DEF&
TTAA00 $$wmoValue! <NOW | ddhhmm | gmt>&&
#include "wwa_county_ugc.template"
&/O.NEW.$$wmoValue!.SV.W.0001.<START|ymdthmz|gmt>-<EXPIRE|ymdthmz|gmt>/

BULLETIN - EAS ACTIVATION REQUESTED&
SEVERE THUNDERSTORM WARNING$$MND_VAL!&
#include "${CURRENT_CWA}-headerIncl.txt"
<NOW | header | local >
...
    |sort_by=[itime] |used=avoid        (other cities list)
```

OB3.3 SVR DEFAULT TEMPLATE:

```
//"SEVERE THUNDERSTORM"

<DURATIONS | 10 | 15 | 20 | 25 | 30=default | 40 | 45 | 50 | 1:00
        | 1:15 | 1:30>
<DEPICT_KEYS|1083><REISSUE>

#include "${CURRENT_CWA}-offtIncl.txt"
<AUX_INFO |wx_hazard=Severe Thunderstorm
        |issue_prod=$$SVRid!
        |init_with=$$SVRid! >

ZCZC $$SVRid! DEF&
TTAA00 $$wmoValue! <NOW | ddhhmm | gmt>&&
#include "wwa_county_ugc.template"
&/O.NEW.$$wmoValue!.SV.W.0001.<START|ymdthmz|gmt>-<EXPIRE|ymdthmz|gmt>/

BULLETIN - EAS ACTIVATION REQUESTED&
SEVERE THUNDERSTORM WARNING$$MND_VAL!&
#include "${CURRENT_CWA}-headerIncl.txt"
<NOW | header | local >
...
    |sort_by=[itime] |used=avoid |interval=-1 |delta=1     (other cities list)
```

OB3.1 SVS DEFAULT TEMPLATE:

```
//"01100|Severe Weather Statement"
<TWO_TIMES><DEPICT_KEYS|1083>

#include "${CURRENT_CWA}-offtIncl.txt"
<AUX_INFO |geo_descriptor=2 |wwa_type=2
        |wx_hazard=Severe Weather
        |specific_hazard=Severe Weather Statement
        |issue_prod=$$SVSid!
        |follow_prods=$$TORid! $$SVRid!>

ZCZC $$SVSid! DEF&
TTAA00 $$wmoValue! <NOW | ddhhmm | gmt>&&
#include "wwa_county_ugc.template"
&/O.$$ACT_VAL!.$$VTEC_EVENT!.000000T0000Z-<EXPIRE|ymdthmz|gmt>/

SEVERE WEATHER STATEMENT$$MND_VAL!&
#include "${CURRENT_CWA}-headerIncl.txt"
<NOW | header | local >
```

OB3.3 SVS DEFAULT TEMPLATE:

```
//"01100|Severe Weather Statement"
<TWO_TIMES><DEPICT_KEYS|1083>
#include "seg_svs_control.inc"

#include "${CURRENT_CWA}-offtIncl.txt"
<AUX_INFO |geo_descriptor=2 |wwa_type=2
        |wx_hazard=Severe Weather
        |specific_hazard=Severe Weather Statement
        |issue_prod=$$SVSid!
        |follow_prods=$$TORid! $$SVRid!>

ZCZC $$SVSid! DEF&
TTAA00 $$wmoValue! <NOW | ddhhmm | gmt>&&

{ [X$$SEG_SVS.eq.XYES] |
SEVERE WEATHER STATEMENT$$MND_VAL!&
#include "${CURRENT_CWA}-headerIncl.txt"
<NOW | header | local > }
```

APPENDIX THREE: FLAT TEXT VTEC AND FOLLOWUP SEGMENTATION TESTING/TRAINING

Read all instructions **THOROUGHLY** before testing.

The general plan here is to turn on WarnGen followup segmentation and VTEC on a test workstation, create warnings that are not saved or sent (but stored as Unix flat files so that WarnGen sees them), then practice creating segmented followup products. ***Note:* If you have used the Flat Text Testing Methodology before, then you may have a CCCNNNXXX directory. In this set of instructions, the CCCNNNXXX directory has been changed to TESTAPROD. Apparently, there has been some confusion with this naming convention and therefore, the name for the directory has been changed.**

Segmentation is scheduled to be implemented November 3, 2004 and VTEC is scheduled to be implemented during early February, 2005. Initially, segmented WarnGen followup products will be issued without VTEC. Then VTEC will be added later. As a result, the segmented templates should be tested both with and without VTEC.

The OB3.3 templates can (and should) be used before followup segmentation is implemented. OB3.3 provides a software switch that can be used to turn segmentation on and off. For testing purposes on one workstation, segmentation can be turned on by doing the following as user fxa:

cd /awips/fxa/data/localizationDataSets/LLL (where LLL is your site ID)
cp /data/fxa/nationalData/seg_svs_control.inc.SEGSVS seg_svs_control.inc
(turn on segmentation)
cp /data/fxa/nationalData/textQC.config.SEGSVS textQC.config
(install the segmented QC configuration file)

If VTEC is also desired, issue the following commands (on the workstation as user fxa):

cd /awips/fxa/data/localizationDataSets/LLL (where LLL is your site ID)
echo ON > warnGenVTEC.mode

At this point, there is no need to restart D2D or WarnGen. VTEC and followup product segmentation will be active. To use the Flat Text Testing Method described below, both WarnGen and D2D must be restarted.

The following is a detailed description of how to test using the Unix Flat Text Method. Sites may have the appropriate directories already set up from previous WarnGen testing.

(1) Open a telnet window on your testing workstation and become user “fxa”. Change directories to /data/fxa and verify that a flatText sub-directory already exists.

cd /data/fxa
ls -l flatText

(2) If a flatText sub-directory already exist, then move on to Step 3. Otherwise, create a flatText sub-directory by using the following commands.

mkdir -p /data/fxa/flatText

(3) Verify that under the flatText sub-directories that you have the following sub-directories for the products that you will test. Note: on the last four sub-directories, please use the actual "CCCNNNXXX" for your site. In the example below, we set up the appropriate directories for WFO Sterling, VA.

cd /data/fxa/flatText
ls

The five sub-directories are:

TESTAPROD (Note: This sub-directory needs to be 9 characters long)
WBCSVRLWX
WBCTORLWX
WBCFFWLWX
WBCSMWLWX

(4) If these sub-directories already exist, then move on to Step 5. Otherwise, create these sub-directories (only for the products you will test) using the following commands.

mkdir /data/fxa/flatText/TESTAPROD
mkdir /data/fxa/flatText/WBCSVRLWX
mkdir /data/fxa/flatText/WBCTORLWX
mkdir /data/fxa/flatText/WBCFFWLWX
mkdir /data/fxa/flatText/WBCSMWLWX

(5) Stop all D2D sessions on your test workstation.

(6) Open two additional telnet windows and become "awipsusr" in both windows.

(7) In one telnet window, enter these commands as "awipsusr":

(a) **setenv FXA_FLAT_FILE_TEXT TRUE**
(b) **setenv FXA_WARNGEN_PRODUCT_ID TESTAPROD**

(8) Double check that the environmental files are set properly.

(a) **echo $FXA_FLAT_FILE_TEXT**
<*response*> **TRUE**
(b) **echo $FXA_WARNGEN_PRODUCT_ID**
<*response*> **TESTAPROD**

(9) After confirming that the environmental files are set properly, Start D2D using the following commands.

(a) **cd /awips/fxa/bin**
(b) **start-d2d -nokeypad** (This will start D2D)

Now WarnGen will send products to the /data/fxa/flatText/TESTAPROD sub-directory (instead of the text editor) with a file name format yyyymmdd_hhmmss. There is no danger of the product being transmitted or saved in the Informix text database.

(10) Once you have started D2D using the Flat Text Testing Mode, check to see if it is set up correctly. To do this. From the Tools Menu, start up a Text Window and sttempt to display a METAR (for example, WBCMTRIAD). If the METAR displays in the Text Window then ***DO NOT "SAVE" ANY WARNINGS - DO NOT GO ANY FURTHER - RESTART at STEP 7.*** If a GUI pops up with the following message ***"AN ERROR OCCURRED READING WBCMTRIAD. THIS COULD BE A NETWORK OR DATABASE ERROR. SORRY, NO FURTHER INFORMATION IS AVAILABLE."***, then your D@D is no longer connected to the Informix Database and you can proceed to Step 11.

(11) Confirm that you are using the Flat Text Testing Mode by using WarnGen to create an innocuous product, like a Short Term Forecast (NOW).

(12) After pressing "CREATE TEXT", the Short Term Forecast should be located in /data/fxa/flatText/TESTAPROD. In the second "awipsusr" telnet window, verify that the warning is in the /data/fxa/flatText/TESTAPROD sub-directory by typing the following command. ***If a Text WarnGen window appears on the Text Workstation, then the Flat Text Test Method is not working - Restart at Step 7.***

cd /data/fxa/flatText/TESTAPROD
ls -lt

(13) The result should look like the following (product created on 5/17/04 at 12:24:32 Z):

-rw-rw-r– 1 awipsusr fxalpha 902 May 17 12:24 20040517_122432

(14) You can examine the product:

more *122432

(15) After you have confirmed that the Short Tem Forecast has made into the TESTAPROD directories, you can move on to creating warnings. Use WarnGen to create a warning of your choice (i.e., TOR, SVR, FFW or SMW). To test segmentation, you want to create a warning covering two or more counties/marine zones, then issue the followup to continue the warning in one area and cancel the warning in the rest of the area. For my example, I will use a Severe Thunderstorm Warning issued by WFO Sterling (i.e., CCCNNNXX=WBCSVRLWX).

(16) Repeat steps 12 through 14 to view or edit your product. You should use an editor of your choice to include Test in the appropriate place according to latest directive to make it a test warning.

(17) You have two methods to "store" your products. The recommended approach is to continue use the Flat Text Test Method (Option A) when testing and verifying yore templates. Option B may want to be used when training the staff on the new OB3.3 functionality (such as VTEC and Product Segmentation).

Option A: Now move your test warning to the appropriate sub-directory (for our example: Move the Severe Thunderstorm Warning into the WBCSVRLWX directory).

mv *122432 ../WBCSVRLWX

The "mv" command will make the workstation think that the product has been "stored" in the text database and transmitted.

Option B: You can also simulate this in a Text Window, by the Text Window option under the D2D Tools Menu. ***DO NOT USE A TEXT WINDOW FROM THE TEXT WORKSTATION. To call up the product, type TESTAPROD for the product ID. You may enter the Editor to test the QC. When you enter the Editor, make sure that you mention "TEST" throughout the warning according to the Directives. Remember to ONLY hit the SAVE button. The product will then "stored" in the appropriate directory (for our example, the Severe Thunderstorm Warning will be "stored" in the WBCSVRLWX directory). DO NOT HIT THE "SEND" BUTTON. OTHERWISE, THE PRODUCT WILL BE TRANSMITTED TO THE WORLD.***

(18) Now go back to WarnGen, and select the followup product (SVS in our example). Use "UPDATE LIST" to make sure the followup list is updated. You may have to wait several seconds for the SVR to appear in the followup list. Use "UPDATE LIST" again if needed. You should see the SVR listed in the WarnGen "followup" pull down menu with options to cancel or continue the warning.

(19) Adjust the warning box to continue the warning in one area and cancel it in the rest of the area. Another possible test is to continue the warning in all areas to confirm that a followup with one segment works correctly.

(20) Press "CREATE TEXT" and examine the followup product in /data/fxa/flatText/TESTAPROD. If you want to "transmit" the followup, "mv" the file to the same directory as the original warning as in step (17) above.

(21) When done testing/training, be sure to return the workstation to normal operational mode. Enter the following as user fxa:

cd /awips/fxa/data/localizationDataSets/LLL (where LLL is your site ID)
rm seg_svs_control.inc
rm textQC.config

If VTEC was turned on, issue the following commands to turn off VTEC (on the workstation as user fxa):

cd /awips/fxa/data/localizationDataSets/LLL (where LLL is your site ID)
rm warnGenVTEC.mode

Also be sure to exit D2D, then exit all the telnet windows on the test workstation. If this is not done, the next person to use WarnGen will not be able to save or send WarnGen products.